



## ARIZONA BAT RESOURCE GROUP NEWSLETTER

Summer 2005

Arizona Bat Conservation News and Information...

### From the Editor:

*Recently, I had the opportunity to visit three states in Mexico (Tamaulipas, Nuevo Leon, Coahuila) to view some of northern Mexico's spectacular bat treasures. My host, Dr. Arnulfo Moreno showed me bat caves and 5 new-to-me bat species, including Vampires! We caught *Leptonycteris nivalis* and *Sturnira* and *Artibeus* species, visited agave plantations where agaves are being planted to create bat foraging habitat and natural erosion control, and watched a spectacular emergence of 100,000+ Mexican free-tailed bats at Cuervo La Boca, near Monterrey. The trip helped me gain a new perspective on some of the obstacles that Mexican biologists face as they work to conserve the 140 or so bat species in Mexico. Mexico does not yet have wildlife agencies at its state levels and lacks the plethora of agency biologists we have in the U.S. (efforts to decentralize wildlife functions to Mexican state levels are underway, but in infancy stages). I learned that most monitoring and conservation is conducted by university researchers. During my trip I saw that Arnulfo had many opportunities to work with Reserve staff and others interested in conserving bats on their managed areas, but they lack training and equipment. In addition, many researchers have little or no budget for basic equipment, like mist nets. I know my fellow bat lovers out there can relate to getting fired up to do something to help make a difference. If you're like me, when your mist nets get a few holes you replace them. SO, my hope is, that if you have old nets that have a few holes in them or need replacing for some reason, please consider donating them (poles/nets/and other related capture equipment). I think you'll agree that having a net with a couple holes (which can be repaired) is better than having no net at all! You can donate equipment through me (for more details contact me at [amcintire@azgfd.gov](mailto:amcintire@azgfd.gov)) and I'll do the necessary legwork to get nets, etc. to biologists in Mexico. Bats and biologists have no borders! Thanks so much for your help.*

*I hope everyone is having a great summer!*

*Until Next Time,*

A handwritten signature in black ink, appearing to read 'Angela McIntire'.

*Bat Management Coordinator  
Arizona Game and Fish Department*

## **National and Regional Updates:**

The Western Bat Working Group held its biennial meeting in Portland, OR, from March 30 – April 2, 2005. Information on the final program, abstracts, and updated species accounts (coming soon) are posted on the Western Bat Working Group website ([www.wbwg.org](http://www.wbwg.org)).

**Western Bat Working Group Conference Call:** The last conference call was on June 7. Notes from the call are now posted on the WBWG website, under the “Business” section. The next conference call will be held on August 24. Please let Angie know if you have an issue for discussion, or if you’d like to participate on the call ([amcintire@azgfd.gov](mailto:amcintire@azgfd.gov))

## **State Update:**

Be sure to check out the new Bat Conservation and Management page on the Arizona Game and Fish Department webpage ([http://www.azgfd.gov/w\\_c/bat\\_conservation.shtml](http://www.azgfd.gov/w_c/bat_conservation.shtml)). It contains links to the Western Bat Working Group, a .pdf copy of the Arizona Bat Conservation Strategic Plan, and information on bats of Arizona. Suggestions and comments are welcome.

## **Arizona Bat Conservation Plan Implementation**

The Arizona Game and Fish Department has made \$40,000 available for bat conservation work for 2005-2006. There’s a good chance we’ll have some more funds for bats before the end of the year, so I expect to report a few more projects will be underway soon. In the meantime, the following projects have been selected for funding, thanks to State Wildlife Grant money.

**The Handbook for the Effective Management of Bats and Mines** Building on more than a decade’s experiences and research in the field, Bat Conservation International will publish a much-needed guide to identifying and managing critical bat habitats within mines.

**Lesser long-nosed bat Movements and Foraging in Central-Eastern Arizona** We have little information on the movements and foraging habits for *Leptonycteris curasoae* in central-eastern Arizona. *Agave parryi*, *Agave chrysantha*, and *Carnegiea gigantea* have extensive ranges in central and eastern Arizona and these areas might support an important transitory roost, migratory route, or population of *L. curasoae*.

**Hualapai Tribe Valentine School Restoration and Bat Relocation** Eminent stabilization of the historic Valentine School on the Hualapai Reservation will eliminate bat access to the structure, which has been used by bats as a maternity roost for many years. As the bats return in April 2006 this project will provide appropriate alternative habitat in the form of strategically located bat houses nearby as well as an on-site, high quality interpretive exhibit.

**Havasu National Wildlife Refuge Mist Net Purchase** Havasu National Wildlife Refuge has been acoustically monitoring riparian revegetation sites for the past two field seasons. The Refuge would like to add mist netting to the survey techniques used in order to obtain a more accurate idea of species presence and utilization.

**San Tan Regional Park Bat Gates** For construction of 1-2 bat gates on abandoned mines at San Tan Mountain Regional Park to protect bat habitat and address public safety concerns.

**New Batmobile tailgate!** Check out the new tailgate graphic on the Arizona Game and Fish Department's "batmobile". It features a stunning Allen's lappet-browed bat (*Idionycteris phyllotis*) and the question, "Did you know...Arizona has 28 species of bats?" If you've got to be stuck in traffic, you may as well get to look at something as beautiful as an *Idionycteris*!



### Field Activities:

Annual Roost Counts for Lesser long-nosed bats: June 18 for the maternity counts (numbers should be ready by the next newsletter) and August 20 for the "fall" count. Let Angie know if you're interested in assisting.

### Announcements and Notes:

#### Baby western yellow bat sighting

We don't have a lot of information on young western yellow bats (*Lasiurus xanthinus*) in Arizona. Although both males and females have been caught in Arizona, no pregnant or lactating females or young have been reported until June 2005. A palm trimmer found a baby yellow bat that had fallen out of a palm and contacted Sandy Wolf in Tucson. The bat was placed in a nearby shrub and was gone the next day. Hopefully mama yellow bat returned to rescue the little fellow.

#### Water Development Design Input Request

Bat Conservation International is currently working with federal range and wildlife managers to evaluate and improve wildlife access and safety at livestock water developments. This involves reviewing current conditions and field-testing different water trough designs and configurations. This information will be used to develop an interagency handbook on improving the value of livestock water developments to wildlife. To this end, we are requesting your input and ideas for effective escape ramp designs and methods for bracing troughs that don't obstruct wildlife access. If you have experience with these or other aspects of water development design and installation, we encourage you to contact the project director Dan Taylor, at [dtaylor@batcon.org](mailto:dtaylor@batcon.org). Your expertise and input will contribute greatly to the success of this effort. More information on the project and the importance of water developments to wildlife can be found on BCI's web site at [www.batcon.org](http://www.batcon.org).

### **Wind Suspected Culprit in Bat Deaths at Caverns**

On the morning of April 5, 106 dead Mexican free-tailed bats were found on the Natural Entrance trail in the upper end of Carlsbad Cavern's twilight zone. The bats were scattered along the trail and walls on two switchbacks in an area open to the night sky, piquing curiosity and begging the question, "What happened?"

While it cannot be known with absolute certainty, the most likely scenario is that strong wind gusts coupled with the unpredictable wind behavior around the cave entrance and cliffs pushed the bats down to the trail where their fragile bones were shattered. The bats did not appear to have suffered any major trauma, although some of them had received postmortem damage, probably from insects and ringtails.

According to the RAWS (remote automated weather station) weather station in Bat Cave Draw, wind gusts were between 48 and 55 mph from 8:45 the previous evening to 6:45 that morning, while the base wind speeds varied between 17 and 33 mph.

A visitor did report that he had been watching bats at the cave entrance the previous evening when he saw one bat get "picked-up" by the wind and "slammed" into the rock cliff. He said, "I even heard it go 'splat'." However, he said he only observed this happening to one bat. Southeastern New Mexico has been experiencing long periods of strong wind gusts over the last few weeks. Last year, while the park received nearly double its average annual rainfall, several severe thunderstorms also hit the area. A late-summer thunderstorm left thousands of dead birds on the streets of the city of Carlsbad, 25 miles to the north. On September 20, 39 dead Mexican free-tailed bats were found under a tree next to the visitor center parking lot. There had been a thunderstorm the previous evening, and the bats probably tried to take refuge in the tree, but were caught in a downdraft.

Carlsbad Cavern is home to nearly 300,000 Mexican free-tailed bats that roost in a passage about one-quarter mile from the cave's large natural entrance. A migratory species, the bats return in the spring to take advantage of the area's plentiful night-flying insects, their favorite food. From mid-May to mid-October, each evening's bat flight is preceded by a program that highlights the benefits of bats and their natural history.

### **Meetings and Events:**

#### **August 21-26, 2005, 10<sup>th</sup> European Bat Research Symposium – Galway, Ireland**

The 10<sup>th</sup> European Bat Research Symposium will meet in Galway, Ireland. All sessions will be held on the National University of Ireland campus, which is located near the center of Galway city. The symposium convener is Jimmy Dunne, Department of Zoology, National University of Ireland, Galway. Details are available on the symposium web sites: <http://www.ebrs10.com>

#### **September 8-11, 2005, Bat Ecology and Field Techniques Workshop - Hastings Natural History Reservation**

Workshop participants will be introduced to the ecology and conservation of California's bats through lectures and demonstrations on species accounts, physiology, anatomy, behavioral ecology, conservation issues, and mitigation strategies. Field techniques of mist-netting, assessing species presence or absence, & acoustic monitoring will be demonstrated with

participants assisting in set-up and analysis. An evening field trip to Pinnacles National Monument should allow capture of several bat species. Due to the handling component of the workshop, participants must furnish proof of rabies vaccination to participate in mist netting. Space is limited to 24 participants. Cost \$460 (\$425 TWS – West members) See: <http://www.tws-west.org/meetings.html#Bats2> for more information.

**October 17-19, 2005, Natural History and Management of Bats Symposium – Sacramento, California**

This Symposium will feature lectures and technology demonstrations about ecology, conservation, behavior, survey methodology, habitat evaluation, and status of most western bat species. It is being held immediately prior to, but independent of the North American Symposium on Bat Research, also in Sacramento. We will have a Technology Showcase and a vendor's area. This will consist primarily of informative presentations from more than a half-dozen expert instructors, but no field component is included. See <http://www.tws-west.org/meetings.html#Bats2> for more information.

**October 19-22, 2005, 35<sup>th</sup> Annual North American Symposium on Bat Research – Sacramento, California**

The 35<sup>th</sup> Annual North American Symposium on Bat Research will convene in Sacramento, CA. The local host is Winston Lancaster. All meeting activities will be held at the Holiday Inn Sacramento Capitol Plaza, where a block of guestrooms has been reserved for NASBR participants. In addition to the scientific platform and poster sessions, Karen Campbell and M. Brock Fenton are organizing a special evening workshop entitled "Innovations in Teaching," in which innovative ideas about teaching will be presented and discussed. Contact Karen Campbell ([kcampbell@alb.edu](mailto:kcampbell@alb.edu)) or Brock Fenton ([bfenton@uwo.ca](mailto:bfenton@uwo.ca)) for more information. The 35<sup>th</sup> Annual NASBR is open to anyone interested in bat biology, not just researchers from North America. Additional information is available at <http://www.nasbr.org/>

**November 7-10, 2005, 8<sup>th</sup> Biennial Conference on Research on the Colorado Plateau – duBois Conference Center, NAU, Flagstaff, Arizona**

The theme of this conference is "Preservation and Restoration of Colorado Plateau Natural and Cultural Landscapes". Planned Special Sessions: Cave Resource Management; Climate Change and Drought Impacts on the Colorado Plateau; Conservation Science, Policy and Practice, and many other interesting topics. <http://www.usgs.nau.edu/conf2005/index.htm>

**February 2-4, 2006, Arizona Bat Resource Group Meeting at Joint Annual Meeting Arizona/New Mexico chapters of The Wildlife Society, Radisson Hotel, Flagstaff, Arizona**

Mark your calendars. The Arizona Bat Resource Group meeting will be held in Flagstaff, in conjunction with the Joint Annual AZ/NM TWS Meeting. Meeting and Conference details will be forthcoming, but if you have meeting agenda ideas, please let Angie know.

**October 18-21, 2006, 36<sup>th</sup> Annual North American Symposium on Bat Research – Wrightsville Beach, North Carolina**

The 36<sup>th</sup> Annual North American Symposium on Bat Research will convene in Wrightsville Beach, NC. Mary Kay Clark will host the Symposium. Information will be posted on the website as it becomes available.